

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0002] on pages 1-2, with the following amended paragraph:

An energy absorbing member that absorbs impact energy is used around a seat of an airplane, around a seat of a vehicle, around a bumper, and in each structural member (see, for example, ~~Patent Document 1 and Patent Document 2~~ Japanese Patent Application Laid-open Publication No. S60-109630 and Japanese Patent Application Laid-open Publication No. S62-17438). Since it necessitates that the energy absorbing member is light and has high rigidity apart from having a capability to absorb the impact energy, a composite material of a resin and a reinforced fiber, so called fiber reinforced plastic (FRP), especially carbon fiber reinforced plastic (CFRP) is suitable. In such energy absorbing member, an energy absorbing mechanism in which a local failure is caused to occur in a certain part of the energy absorbing member, such as an edge of the member as a starting point, and energy is absorbed by using this local failure, can be considered.

Please replace paragraph [0005] on pages 2-3, with the following amended paragraph:

For this reason, so far, as an energy absorbing member, in a laminated composite material in which fibers are laminated, upon evaluating an effect due to a fiber material or a fiber orientation, for suppressing a peak of an initial load, providing an initiator that becomes a starting point for the destruction to occur has been proposed (see, for example, ~~Patent Documents 3 to 5~~ Japanese Patent

Application Laid-open Publication No. H6-300068, Japanese Patent Application Laid-open Publication No. H6-341477, and Japanese Patent Application Laid-open Publication No. H7-217689). Whereas, in a composite structure of resin and fiber, to improve an out-of-plane strength (peel strength) including a shearing strength between layers and of a composition plane, a textile substrate for the composite material that uses needling has been proposed (see, for example, ~~Patent Document 6~~ Japanese Patent Application Laid-open Publication No. 2003-39429).

Please delete paragraph [0006] on page 3.

Please replace paragraph [0007] on page 3, with the following amended paragraph:

However, in the energy absorbing member disclosed in ~~Patent Documents 3 to 5~~ Japanese Patent Application Laid-open Publication No. H6-300068, Japanese Patent Application Laid-open Publication No. H6-341477, and Japanese Patent Application Laid-open Publication No. H7-217689, there are proposals of raising energy absorption ability by an orientation of fibers by using on an inner side reinforced fibers of a strength higher than that on an outer side (~~Patent Document 3~~ Japanese Patent Application Laid-open Publication No. H6-300068), raising energy absorption ability by selecting material property (~~Patent Document 4~~ Japanese Patent Application Laid-open Publication No. H6-341477), and causing a sequential destruction assuredly and smoothly in a predetermined part by embedding a peel auxiliary layer that inhibits adhesion between the layers, but there is a problem that once the energy absorbing member has received an

impact, the progress of the destruction depends fully on the material.

Please replace paragraph [0008] on pages 3-4, with the following amended paragraph:

Moreover, in the textile substrate for the composite material disclosed in ~~Patent Document 6~~ Japanese Patent Application Laid-open Publication No. 2003-39429, the strength between the layers and of the composition plane is improved and a contribution is made to improve a bending strength, however when it has received a compression such as it is received by the energy absorbing member, it is not the one that controls to absorb the impact while destroying a resin, and since this has a high strength as a medium even if it is used just as an energy absorbing member, it is not something that can absorb the impact effectively.

Please replace paragraph [0044] on pages 14-15, with the following amended paragraph:

A manufacturing example of the impact-absorbing composite structure according to the present embodiment is described below. Fig. 7 shows an example, in which the prepreg is manufactured, then the needling is applied, and pressure is applied by autoclave. As shown in Fig. 7, a manufacturing method of the impact-absorbing composite structure includes a cutting process (S11) of cutting the prepreg that includes a resin and a fiber laminated body to a predetermined length, then a lamination process (S12) of laminating these, a needling process (S13) of applying needling as the ~~interlayer strength technique~~ interlayer strength improvement technique on the

laminated body, a jig mounting process (S14) of mounting the laminated body on which the needling is applied on a jig, a hardening process by pressurizing and heating (S15) of hardening by heating while pressurizing after mounting on the jig, and a cutting and processing process of removing from the jig, cutting, and processing. This enables to obtain the impact-absorbing composite structure with the improved impact resistance.

Please replace paragraph [0045] on pages 15-16, with the following amended paragraph:

Fig. 8 is an example in which it is formed by a vacuum resin impregnation forming method. As shown in Fig. 8, the manufacturing method of the impact resisting composite structure includes the cutting process (S21) of cutting the fiber laminated body to a predetermined length, the lamination process (S22) of laminating these, the needling process (S23) of applying needling as the ~~interlayer strength technique~~ interlayer strength improvement technique on the laminated body, the jig mounting process (S24) of mounting the laminated body on which the needling is applied on the jig, a defoaming process (S25) of defoaming with the resin, a preheating process (S26) of preheating the resin that is defoamed, a hardening process by resin impregnation and heating of supplying the resin that is preheated in the preheating process (S26), impregnating it, and heat hardening, and the cutting and processing process (S28) of removing from the jig, cutting, and processing. This enables to obtain the impact-absorbing composite structure with the improved impact resistance.